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FILE COVERS 1907 - 21 Sep 2004 VOL 141 ISS 13 FILE LAST UPDATED: 20 Sep 2004 (20040920/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que

L1

STR

Structure attributes must be viewed using STN Express query preparation. L2 622 SEA FILE=REGISTRY SSS FUL L1

L5 3 SEA FILE=CAPLUS L2 AND PYROGLUTAM?

=> d l5 1-3 ibib abs hitstr

INVENTOR(S):

L5 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:157497 CAPLUS

DOCUMENT NUMBER: 140:199208

TITLE: Preparation of amlodipine pyroglutamic acid

salts with improved stability and solubility.

Youn, Yong Sik; Cho, Seong Hwan; Park, Choong Sil; Kim, Yun Cheul; Lim, Dong Kwon; Jung, Sung Hak; Lee, Sung Hak; Kang, Hyun Suk; Park, Kyung Mi; Jung, Yun Taek; Kim, Young Hoon; Yeon, Kyu Jeong; Chae, Myeong Yun; Jin, Hae Tak; Suh, Hea Ran; Lee, Kwang Hyeq; Lee,

Hyuk Koo

PATENT ASSIGNEE(S):

CJ Corporation, S. Korea

SOURCE: Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND DATE	APPLICATION NO.	DATE							
•	EP 1391453	A1 20040225	EP 2003-18653	20030820							
	R: AT, BE, CH,		GB, GR, IT, LI, LU,	NL, SE, MC, PT,							
	IE, SI, LT,	LV, FI, RO, MK,	CY, AL, TR, BG, CZ,	EE, HU, SK							
	US 2004158075		US 2003-642754	20030819							
	WO 2004018426		WO 2003-KR1677								
			BA, BB, BG, BR, BY,								
			DZ, EC, EE, ES, FI,								
			JP, KE, KG, KP, KZ,								
			MN, MW, MX, MZ, NI,								
			SE, SG, SK, SL, SY,								
			VN, YU, ZA, ZM, ZW,	AM, AZ, BY, KG,							
	KZ, MD, RU,		C. C. T. T. T.								
			SL, SZ, TZ, UG, ZM,								
			FI, FR, GB, GR, HU,								
			BF, BJ, CF, CG, CI,	CM, GA, GN, GQ,							
	GW, ML, MR, JP 2004131483	NE, SN, TD, TG A2 20040430	JP 2003-297765	20030821							
DDTO	RITY APPLN. INFO.:	AZ 20040430									
AB		galt of amloding	ine is claimed. Thus	A 20020821							
ΑШ	amlodinine in EtOAc	was treated with	(S)-pyroglutamic ac	rid at							
	25° followed by sti	rring for 1 h to	give 95.3% amlodipir	ne (S) -							
			proved stability on								
			and hydrochloride sa								
IT	663180-17-4P 663180										
	RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU										
	(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES										
	(Uses)										
	(preparation of amlodipine pyroglutamic acid salts with improved										
	stability and so			-							
RN	663180-17-4 CAPLUS										
CN	L-Proline, 5-oxo-,	compd. with 3-eth	nyl 5-methyl 2-[(2-an	ninoethoxy) methyl] -							
	4-(2-chlorophenyl)-1,4-dihydro-6-methyl-3,5-pyridinedicarboxylate (1:1)										
	(9CI) (CA INDEX NA	ME)									
	av										
	CM 1										

$$\begin{array}{c} \text{MeO-C Cl} \\ \text{Me} \\ \text{HN} \\ \text{C-OEt} \\ \text{H}_2\text{N-CH}_2\text{-CH}_2\text{-O-CH}_2 \\ \end{array}$$

CRN 88150-42-9 CMF C20 H25 C1 N2 O5 10/642,754

CM 2

CRN 98-79-3 CMF C5 H7 N O3

Absolute stereochemistry. Rotation (-).

RN 663180-18-5 CAPLUS

CN D-Proline, 5-oxo-, compd. with 3-ethyl 5-methyl 2-[(2-aminoethoxy)methyl]-4-(2-chlorophenyl)-1,4-dihydro-6-methyl-3,5-pyridinedicarboxylate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 88150-42-9 CMF C20 H25 Cl N2 O5

CM 2

CRN 4042-36-8 CMF C5 H7 N O3

Absolute stereochemistry. Rotation (+).

RN 663180-19-6 CAPLUS

CN Proline, 5-oxo-, compd. with 3-ethyl 5-methyl 2-[(2-aminoethoxy)methyl]-4-(2-chlorophenyl)-1,4-dihydro-6-methyl-3,5-pyridinedicarboxylate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 88150-42-9

CMF C20 H25 Cl N2 O5

CM2

149-87-1 CRN C5 H7 N O3 CMF

IT **88150-42-9**, Amlodipine

> RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of amlodipine pyroglutamic acid salts with improved stability and solubility)

RN 88150-42-9 CAPLUS

CN3,5-Pyridinedicarboxylic acid, 2-[(2-aminoethoxy)methyl]-4-(2chlorophenyl)-1,4-dihydro-6-methyl-, 3-ethyl 5-methyl ester (9CI) INDEX NAME)

$$\begin{array}{c} \text{MeO-C Cl} \\ \text{Me} \\ \text{HN} \\ \text{C-OEt} \\ \text{H}_2\text{N-CH}_2\text{-CH}_2\text{-O-CH}_2 \\ \end{array}$$

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CAPLUS COPYRIGHT 2004 ACS on STN ANSWER 2 OF 3

ACCESSION NUMBER:

2004:41231 CAPLUS

DOCUMENT NUMBER:

140:111429

TITLE:

Preparation of substituted heterocyclic derivatives

INVENTOR(S):

useful as antidiabetic and antiobesity agents

Cheng, Peter T. W.; Chen, Sean; Devasthale, Pratik;

Ding, Charles Z.; Herpin, Timothy F.; Wu, Shung;

Zhang, Hao; Wang, Wei; Ye, Xiang-Yang

PATENT ASSIGNEE(S):

Bristol-Myers Squibb Company, USA

SOURCE:

PCT Int. Appl., 543 pp.

DOCUMENT TYPE:

CODEN: PIXXD2 Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PA'	PATENT NO. WO 2004004665			A2 20040115			APPLICATION NO.					DATE					
							WO 2003-US22149				<b></b>	20030702					
WO	WO 2004004665					2004											
	W:	ΑE,	ΑG,	ΑL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,
		PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,
		TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,
		ΚZ,	MD,	RU,	TJ												
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	BG,
		CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,
		NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,
		GW,	ML,	MR,	ΝE,	SN,	TD,	TG									
US 2004063700				A1		2004	0401	1	US 2	003-	6163	65		2	0030	708	
PRIORITY APPLN. INFO.:									1	US 2	002-3	3945	08P	:	P 20	0020	709
OTHER SOURCE(S):					MAR	TA9	140:	1114:	29								
GI																	

$$R^{2}$$
 $R^{2}$ 
 $R^{3}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{3}$ 
 $R^{3}$ 

AB The title compds. (I) [Z1 = (CH2)q, CO; Z2 = (CH2)p, CO; D = CH, CO,(CH2)m (where m = 0-3; p = 1, 2; q = 0-2); n = 0-2; Q = C, N; A = (CH2)x(where x = 1-5); A = (CH2)x1 (where x1 = 1-5) with an alkenyl bond or an alkynyl bond embedded anywhere in the chain; or A = -(CH2)x2-0-(CH2)x3-(where X2, X3 = 0 to 5, provided that at least one of x2 and x3 is other than 0); B = a bond or (CH2)x4 (where x4 = 1-5); X = CH, N; X2-X6 = C, N, O, or S and at least one of X2-X6 is C; R1 = H, alkyl; R2 = H, alkyl, alkoxy, halogen, (un) substituted amino; R2a, R2b, R2c = H, alkyl, alkoxy, halogen, (un) substituted amino, cyano; R3 = H, alkyl, arylalkyl, aryloxycarbonyl, alkyloxycarbonyl, alkynyloxycarbonyl, alkenyloxycarbonyl, arylcarbonyl, alkylcarbonyl, aryl, heteroaryl, cycloheteroalkyl, etc.; E =CH, N; Z = (CH2)x5 (where x5 is 0, i.e. a single or a double bond, 1, 2), or Z is (CH2)x6 (where x6 = 2-5), where (CH2)x6 includes an alkenyl (C:C) bond embedded within the chain or Z = -(CH2)x7-O-(CH2)x8- (where x7, x8 =0-4); (CH2)x to (CH2)x8, (CH2)m, (CH2)n, (CH2)p and (CH2)q may be optionally substituted; Y = CO2R4 (where R4 = H, alkyl, or a prodrug ester), or Y = a C-linked 1-tetrazole, a phosphinic acid of the structure P(0)(OR4a)R5 [where R4a = H, a prodrug ester; R5 = alkyl or aryl, or a phosphonic acid of the structure P(O)(OR4a)2]] including all stereoisomers, prodrug esters, and pharmaceutically acceptable salts thereof are prepared These compds., e.g. cis-1-ethoxycarbonyl-4-[3-[2-(2phenyl-5-methyloxazol-4-yl)ethoxy]phenyl]pyrrolidin-3-ylacetic acid and cis-1-(6-trifluoromethylpyrimidin-2-yl)-4-[3-[2-(2-phenyl-5-methyloxazol-4yl)ethoxylphenyl]pyrrolidine-3-carboxylic acid, modulate serum levels of

Ι

blood glucose, triglyceride, insulin, and nonesterified fatty acid (NEFA) levels, and thus are particularly useful in the treatment of diabetes and obesity, especially Type 2 diabetes, as well as hyperglycemia, hyperinsulinemia,

hyperlipidemia, obesity, atherosclerosis, and related diseases employing such substituted acid derivs. alone or in combination with another antidiabetic agent and/or a hypolipidemic agent and/ or other therapeutic agents. Disclosed is a method for treating diabetes, especially Type 2 diabetes, and related diseases such as insulin resistance, hyperglycemia, hyperinsulinemia, elevated blood levels of fatty acids or glycerol, hyperlipidemia, obesity, hypertriglyceridemia, inflammation, Syndrome X, diabetic complications, dysmetabolic syndrome, atherosclerosis, and related diseases, which comprises administering to a patient in need of treatment a therapeutically effective amount of the compound I. Also disclosed is a method for treating early malignant lesions (such as ductal carcinoma in situ of the breast and lobular carcinoma in situ of the breast), premalignant lesions including fibroadenoma of the breast and prostatic intraepithelial neoplasia (PIN), liposarcomas and various other epithelial tumors (including breast, prostate, colon, ovarian, gastric and lung), irritable bowel syndrome, Crohn's disease, gastric ulceritis, and osteoporosis and proliferative diseases such as psoriasis, which comprises administering to a patient in need of treatment a therapeutically effective amount of the compound I.

IT 111470-99-6, Amlodipine besylate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combination therapy; preparation of substituted heterocyclic derivs. as antidiabetic and antiobesity agents)

RN 111470-99-6 CAPLUS

CN 3,5-Pyridinedicarboxylic acid, 2-[(2-aminoethoxy)methyl]-4-(2-chlorophenyl)-1,4-dihydro-6-methyl-, 3-ethyl 5-methyl ester, monobenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 88150-42-9 CMF C20 H25 Cl N2 O5

$$\begin{array}{c} \text{MeO-C Cl} \\ \text{Me} \\ \text{HN} \\ \text{C-OEt} \\ \text{H}_2\text{N-CH}_2\text{-CH}_2\text{-O-CH}_2 \\ \end{array}$$

CM 2

CRN 98-11-3 CMF C6 H6 O3 S

ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:535071 CAPLUS

DOCUMENT NUMBER:

139:286210

TITLE:

Topological virtual screening: A way to find new

anticonvulsant drugs from chemical diversity

AUTHOR (S):

SOURCE:

Bruno-Blanch, L.; Galvez, J.; Garcia-Domenech, R.

CORPORATE SOURCE:

Faculty of Exact Sciences, Biological Sciences

Department, Medicinal Chemistry Laboratory, National University of La Plata, La Plata, B1900AVV, Argent. Bioorganic & Medicinal Chemistry Letters (2003),

13(16), 2749-2754

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER:

Elsevier Science B.V.

DOCUMENT TYPE:

Journal

LANGUAGE: English

A topol. virtual screening (tvs) test is presented, which is capable of identifying new drug leaders with anticonvulsant activity. Mol. structures of both anticonvulsant-active and non active compds., extracted from the Merck Index database, were represented using topol. indexes. By means of the application of a linear discriminant anal. to both sets of structures, a topol. anticonvulsant model (tam) was obtained, which defines a connectivity function. On the basis of this model, 41 new structures with anticonvulsant activity have been identified by a topol. virtual screening.

IT **88150-42-9**, Amlodipine

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(topol. virtual screening to find new anticonvulsant drugs from chemical diversity)

88150-42-9 CAPLUS RN

3,5-Pyridinedicarboxylic acid, 2-[(2-aminoethoxy)methyl]-4-(2-CN chlorophenyl)-1,4-dihydro-6-methyl-, 3-ethyl 5-methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & \\ \text{Me} & & \\ & & \\ & & \\ & & \\ \text{H}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O}-\text{CH}_2} & \\ & & \\ & & \\ & & \\ \end{array}$$

50

REFERENCE COUNT:

THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT